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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/316,735	05/21/1999	SHU YUEN RON HUI	12364.1US11	8231

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EXAMINER

NGUYEN, TUYEN T

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 11/29/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/316,735

Applicant(s)
Hui et al.

Examiner
Tuyen Nguyen

Art Unit
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 21, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 24-29, and 36-46 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 24-29, and 36-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 54-110424

Japan 54-110424 discloses a high frequency coil [figure 5a, 5b] comprising first and second windings deposited on opposed sides of a printed circuit board with no transformer core. The transformer inherently could have been operated at an optimum frequency in which the impedance of the transformer circuit is at a maximum. [it is noted that applicant has not claimed any specific structural details.]

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-3, 26-27 and 36-46, are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 54-110424 in view of Tolfsen et al. [US 5,579,202].

Japan 54-110424 discloses the instant claimed invention except for the specific operating frequency.

Tolfsen et al. disclose a coreless transformer device [figure 8] operating at a frequency range of 500kHz to 4Mhz and capacitors [C1-C3] for controlling the frequency of the transformer device.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the transformer operating design of Tolfsen et al. in Japan 54-110424 for the purpose of increasing and controlling the operating frequency of the transformer.

5. Claims 4-6 and 28-29, are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 54-110424 in view of Tolfsen et al. as applied to claims 1-3 and 26-27 above, and further in view of Commander et al. [US 4,748,532].

Japan 54-110424, as modified, disclose the instant claimed invention except for: the transformer being operated by a high-frequency carrier signal modulated by a low-frequency switching signal.

Commander et al. discloses a transformer being operated by a high-frequency carrier signal modulated by a low-frequency switching signal [see abstract].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to operate the transformer of Japan 54-110424, as modified, to use a high-frequency

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carrier signal modulated by a low-frequency switching signal, as suggested by Commander et al., for the purpose of controlling oscillation.

To optimize the carrier signal and switching signal would have been obvious as a means to achieve optimal transformer performance.

6. Claims 7-8 and 25-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 54-110424 in view of Tolfen et al. and Commander et al. as applied to claims 1-6 and 28-29 above, and further in view of Miyoshi et al. [US 3,866,086].

Japan 54-110424, as modified, disclose the instant claimed invention except for: a capacitance being connected across the secondary winding for adjusting resonance frequency.

Miyoshi et al. discloses a transformer [figure 7] having a capacitance [29] being connected across the secondary winding for adjusting resonance frequency.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a capacitance about the secondary winding of Japan 54-110424, as modified, as suggested by Miyoshi et al., for the purpose of controlling resonance.

Response to Arguments

7. Applicant's arguments filed 8/21/01 have been fully considered but they are not persuasive.

Applicant argues that:

[1] JP 54-110424 does not disclose a coreless transformer.

[2] Tolfen et al. would not be compatible with the design of JP 54-110424.

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[3] Tolfsen et al. is non-analogous art.

The examiner disagrees.

Regarding [1], JP 54-110424 discloses a coreless transformer [see figures 5A-B].

Regarding [2], Tolfsen et al. discloses that frequencies in a range of 500kHz to 4MHz can be used in a coreless transformer. A skilled artisan would have been motivated to use the transformer operating design of Tolfsen et al. with JP 54-110424 for the purpose of increasing the operating frequency. Tolfsen et al. does not necessarily required any specific physical transformer design.

Regarding [3], in response to applicant's argument that Tolfsen et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Tolfsen et al. discloses a control system for coreless transformer.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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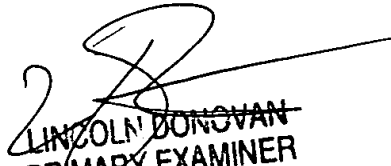
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Gellner, can be reached at (703)308-1721. The fax number for this Group is (703)305-1341.

Any inquiry of a general nature or relating to the status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

TTN TTN
November 12, 2001


LINCOLN DONOVAN
PRIMARY EXAMINER
GROUP 2100